

CLAIMS

1. An arrangement for the production of a three-dimensional product, which arrangement comprises a work bench on which the said three-dimensional product is to be constructed, a powder dispenser which is arranged to apply a thin layer of powder onto the work bench to create a powder bed, an irradiation gun for transmitting energy to the powder so that melting of the powder takes place, the arrangement comprising a casing within which the pressure is reduced in relation to the atmospheric pressure and within which the work bench and the irradiation gun are located, characterized in that the powder dispenser, or a supply pipe connected to the powder dispenser, is arranged partially outside the casing.
2. The arrangement as claimed in claim 1, characterized in that it comprises means for preventing the powder dispenser's contact with the surroundings affecting the pressure conditions inside the casing.
3. The arrangement as claimed in claim 2, characterized in that the means for maintaining the pressure conditions inside the casing is a column of powder in the powder dispenser.
4. The arrangement as claimed in claim 3, characterized in that the column of powder has a height of 1000 mm.
5. The arrangement according to any one of the above claims, characterized in that it comprises a first chamber (23), which encloses the work bench, and a second chamber (24), which encloses the irradiation gun (6), the chambers (23), (24) being located inside the casing and connected to each other via a duct (25).
6. The arrangement as claimed in claim 5, characterized in that the powder dispenser is arranged in association with the first chamber.

7. The arrangement according to any one of the above claims, characterized in that it comprises a supply device (31) in the form of a container with compartments which can be moved so that powder can be supplied to the powder dispenser (4) from the different compartments.
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